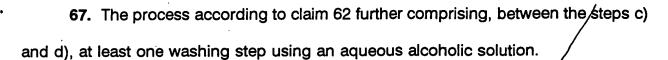
b) desorbing the nucleic acids from the anion exchanger using a second buffer solution, which has a higher ionic strength than the first buffer solution, effecting purified nucleic acids in the second buffer solution; and in a second separation/purification stage,

ii)

- c) adsorbing the separation/purified nucleic acids in the second buffer solution onto the surface of a mineral support material, optionally in the presence of lower alcohols, poly(ethylene glycol), or a mixture thereof, and d) desorbing the nucleic acids from the mineral support material using an eluant, wherein the eluant is water or a third buffer solution, which has an ionic strength lower than the second buffer solution, effecting twice-purified nucleic acids.
- out in immediate succession.
- 64. The process according to claim 62, wherein, prior to the digesting step, the cells are subjected to centrifugation or filtration in order to remove undissolved components.
- 65. The process according to claim 62 further comprising, between the steps a) and b), one or more washing steps using a fourth buffer solution, which has a low ionic strength, optionally increasing ionic strength per washing step.
- 66. The process according to claim 62 further comprising, between the steps c) and d), one or more washing steps using a fifth buffer solution, which has an ionic strength higher than the first buffer solution.



- **68.** The process according to claim 62 further comprising, between the steps c) and d), a washing step using a solution having an ionic strength corresponding to a 1.5 molar sodium perchlorate solution and a pH of 5.
- 69. The process according to claim 62, wherein the anion exchanger has a high surface charge.
- **70.** The process according to claim 62, wherein the isolated and purified nucleic acid comprises from 10 nucleotides to 200,000 nucleotides.
- 71. The process according to claim 62, wherein the mineral support material is silica gel, glass, zeolite, aluminum oxide, titanium dioxide, zirconium dioxide, kaolin, diatomacae, or a combination thereof.
- 72. The process according to claim 62, wherein the anion exchanger includes a porous or non-porous matrix having a particle size of from 1 to 250 μm.
- 73. The process according to claim 62, wherein the anion exchanger includes a porous or non-porous matrix playing a particle size of from 10 to 30 μ m.
- 74. The process according to claim 62, wherein the mineral support is silica gel, in suspension, having a particle size of from 1 to 250 μ m.
- 75. The process according to claim 62, wherein the mineral support is silica gel, in suspension, having a particle size of from 1 to 5 μ m.
- 76. The process according to claim 62, wherein the anion exchanger has a particle size of from 1 to 250 μm and a pore diameter of from 1 to 2,500 nm.

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